Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRIS THE ENHANCER AND METHODS OF USE THEREO Inventor: December 20 Methods of Use Thereo Inventor:

Sheet 1 of 33

| -12014 | -6038 | \$155 | -3387 | -2394        | -594 +33    |
|--------|-------|-------|-------|--------------|-------------|
|        |       |       |       | <u>::::1</u> | YIIII       |
| 1      | 5976  | 6859  | 862   | 9620         | 11420 12047 |

# FIGURE 1

Sheet 2 of 33

| HKLK2.LA0<br>PSE | ( 6998)<br>( 509)   | AA-CTGAGCCTTGATTATATTG-GAGCTTGGTTGCA-CAG-ACATGTCGA :: :: :: :: :: :: :: :: :: :: :: :: ::   |
|------------------|---------------------|---|
| HKLK2.LA0<br>PSE | ( 7044)<br>( 553)   | CCACCTICATGGCTGAACTTTAGTACTTAGCCCCTCCAGACGTCTACAGC ::::::::::::::::::::::::::::::::::   |
| HKLK2.LA0<br>PSE | (7094)<br>(590)     | TGATAGGCTGTAACCCAACAT-TGTCACCATAAATCACATTGTTAGACTA :::::::::::::::::::::::::::::::::::  |
| HKLK2.LA0<br>PSE | (7143)<br>(630)     | TCCAGTG-TGGCC-CAAGCTCCCGTGTAAACACAGGCACTCTAAACAG: :: :: :: :: :: :: :: :: :: :: :: ::   |
| HKLK2.LA0<br>PSE | (7189)<br>(677)     | -G-CAGGATATTICAAAAGCII-AGAGATGACCICCCAGGAGCTGAATGC : :::: : :::: :::::::::::::::::::::::  |
| HKLK2.LA0<br>PSE | (7236)<br>(* 727)   | AAA-GACCTGGCCICTTTGGGCAAGGAGAATCCTTTACCGCACACTCTCC ::: : :::: ::::: ::::: :::::: AAACG-CCTGAGGTCTTTGAGCAAGGTCAGTCCTCTGTTGCACAGTCTCC |
| HKLK2.LA0<br>PSE | ( 7285)<br>( 776)   | TTCACAGGGTTATTGTGAGGATCAAATGTGGTCATGTGTGTG  |
| HKLK2.LA0<br>PSE | ( 7335)<br>( 826) . | GCACATGTCTGGCTGTGGAGAGTGACTTCTATGTGTGCTAACATTGCT ::::::::::::::::::::::::::::::::::   |
| HKLK2.LA8<br>PSE | (7383)<br>(-876)    | GAGTGCTAAGAAAGTATTAGGCATGGCT-TTCAGCACTCACAGATGCTCA  |

## FIGURE 2A



Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF Inventor: 0 YU et al. Applicatio 09/875,228 Docket No.: 348022000901

Sheet 3 of 33

| HKLK2.LA0 | ( 7432) | TCTAATCCTCACAACATGGCTACAGGG-TGGGCACTACTAGCCTCATTTG  |
|-----------|---------|---|
| PSE       | ( 925)  | TCTCATCCTCACAACATGGCTACAGGG-TGGGCACTACTAGCCTCATTTG  TCTCATCCTCACAGCATCACTA-TGGGATGGGTATTACTGGCCTCATTTG  ::: ::: ::: ::::::::::::::::::::::  |
| HKLK2.LA0 | (7481)  | ACAGAGGAAAG-GACTGTGGATAAGAAGGGGGAA  |
| PSE       | ( 974)  | ATGGA-GAAAGTGGCTGTGGCTCAGAAAGGGGGGGGCCACTAGACCAGGGA   |
| HKLK2.LA0 | (7530)  | CATICIGRATGCAAGGGG-CICCACAGGAGGAGG  |
| PSE       | (1023)  | CACTCTGGATGC-TGGGGACTCCAGA-GACCATGACTAGACTA   |
| HKLK2.LA0 | ( 7579) | AGAGAAATTATGG-CTGGATGTCTCTGCCCCGGAAAGGG-GGAT  |
| PSE       | (1071)  | AGAGAAATTAATTGTGGCCT-GATGTCCCTGTCCTGGAGAGGGTGGAGGT  |
| HKLK2.LA0 | (7821). | GCACTITCTTGACCCCTATCTCACATCTTG  |
| PSE       | (1120)  | GGACCTTCACTAACCTCCTACCT-TGACCCTCTCTTTTAGGGCTCTTTCT  |
| HKLK2.LA0 | (7670)  | GACTTCCTCTATGATACCAGGAGCCCATCATAATCTCTCTGTGTCCTCTC  |
| PSE       | (1169)  | GACCTCCACCATGGTACTAGGA-CCCCATTGTAT-TCTGT-ACC-CT-  |
| HKLK2.LA0 | (7720)  | CCCTTCCTCAGTCTTACTG-CCCACCTCCACCA |
| PSE       | (1212)  | : : : : : : : : : : : : : : : : : : :   |
| HKLK2.LA0 | (7769)  | CCAGGTGTAGCCACAGTACCTAACTCT-TTGCAGAGAACTATAAATGTGT  |
| PSE       | (1250)  | GG-GTCC-CT-CCTATCTCTATT-CCCAGCTGGCCA-GTGC   |
| HKLK2.LA0 | (7818)  | A-TCCTACAGGGGAGAAAAAA-AAAAG-AACTCTGAAAGAGCTGACATT   |
| PSE       | (1287)  | AGT-CT-CAGTGCCCACCTGTTTGTCAGTAACTCTGAAGGGGCTGACATT  |
| HKLK2.LA0 | (7865)  | TTACCGACTIGCAAACACATAAGCTAACCTGCCAGTTTTGTGCT  |
| PSE       | (1335)  | TTACTGACTTGCAAACAAATAAGCTAACTTTCCAGAGTTTTGTGCT  |
| HKLK2.LAB | (7909)  | GGTAGAACT-CATGAGACICCIGGGTCAGAGGCAAAAGATTTATTACCC   |
| PSI       | (1385)  | GGCAG-AGICCATGAGACICCIGAGICAGAGGCAAAGGCIIIIACIGCIC  |

## FIGURE 2B

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| HKLK2.LA0 | ( 7958) | ACAGCTAAGGAGGCAGCATGAACTTTGTGTTCACATTTGTTCACTTTGCC                                   |
|-----------|---------|--|
| PSE       | (1434)  | ACAGCTAAGGAGGCAGCATGAACTTTGTGTTCACTTTGCC ::::::::::::::::::::::::::::::::            |
| HKLK2.LA0 | (8008)  | ::   |
| PSE       | (1484)  | CCCCCCAAATCTTGTAGGG-TGACCAGAGCAG-TCTAGGTGGATGCIGTG                                   |
| HKLK2.LA0 | (8051)  | CA-CAGGGGTTIGTGCCAAACCTCAGGAAGGA   |
| PSE       | (1532)  | CAGAAGGGTTTGTGCCACTGGTGAGAAACCT-GAGATTAGGAATCCTCA                                    |
| HKLK2.LA0 | (8099)  | ATCTTATAAGAAGGTACTAGCAAACTTGTC-CAGTCTTTGTATCTGA                                      |
| PSE       | (1581)  | ATCTTAT-ACTGGG-ACAACTTGCAAACCTG-CTCAGCCTTTGTCTCTGA                                   |
| HKLK2.LA0 | (8145)  | CGGAGATATTATCTTTATAAT TCCC TTCAAA  |
| PSE       | ( 1628) | TGAAGATATTATCTTCATGATCTTGGATTGAAAGCAGACCTACTCTGGAG                                   |
| HKLK2.LA0 | (8193)  | GAACATATIGIATITATIGICCI CAACACTAAA   |
| PSE       | (1678)  | GAACATATTGTATCGATTGTCCTTG-ACAGTAAACAAATCTGCTGTAAAA                                   |
| HKLK2.LA0 | (8242)  | TAGACGITAACIITAITAICIAAGG_CACTAACGAAAGGT   |
| PSE       | ( 1725) | GAGACATTATCTTATTATCT-AGGACAGTAAGCAAGCCTAGATCTGAAG :::::::::::::::::::::::::::::::::: |
| HKLK2.LA0 | (8291)  | -GCGATACCATCTTGCAAGGCTATCTGCTGTACAAATATGCTTGAAAAGA                                   |
| PSE       | (1773)  | AGAGATATCATCTTGCAAGGATGCCTGCTTTACAAACATCCTTGAAAAGA                                   |
| HKLK2.LA0 | (8340)  | TGGTCCAGAAAAGAAAACGGTATTATTGCCTTTGCTCAGAAGACACACAG                                   |
| PSE       | ( 1823) | CAATCCAGAAAA-AAAAAGGIGTTGCTGTCTTTGCTCAGAAGACACACAG                                   |
| HKLK2.LA0 | (8390)  | AAACATAAGAGAACCATGGAAAATTGTCTCCCAACACTGTTCACCCAGAG                                   |
| PSE       | (1872)  | ATACGTGACAGAACCATGGAGAATTGCCTCCCAACGCTGTTCAGCCAGAG                                   |
| HKLK2.LA0 | (8449)  | CCTTCCACTCTTGTCTGCAGGACAGTCTTAACATCCCATCATTAG-T-GT                                   |
| PSF       | (1922)  | CCTTCCACCCTGCCGCAGGACAGTCTCAACGTCCCATCATTAG-T-GT                                     |

## FIGURE 2C

Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF Inventor has YU et al.

Inventor hao YU et al. Applicat b.: 09/875,228 Docket No.: 348022000901



| HKLK2.LA0 | (8488)  | GTCTACCACATCTGGCTTCACCGTGCCTAACCAAGATTTCTAGGTCCA   |
|-----------|---------|--|
| PSE       | ( 1972) | TCTTCTATCACATCCTGCTTCTTTATGCCTAACCAAG-GTTCTAGGTCCC |
| HKLK2.LA0 | (8536)  | GTICCCACCATCITICCCACTCCCCACTCCC                    |
| PSE       | (2021)  | GAT CGACTGIGTCTGGCAGCACTCCACTGCCAAACCCAGAATAAGGGA  |
| HKLK2.LA0 | (8586)  | GTGCTCAGAATTCCGA                                   |
| PSE       | (2069)  | GCGCTCAGGATCCCGA                                   |

FIGURE 2D

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Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPT OF THE ENHANCER AND METHODS OF USE THERE

Invento Chao YU et al. Application No.: 09/875,228 Docket No.: 348022000901

Sheet 6 of 33

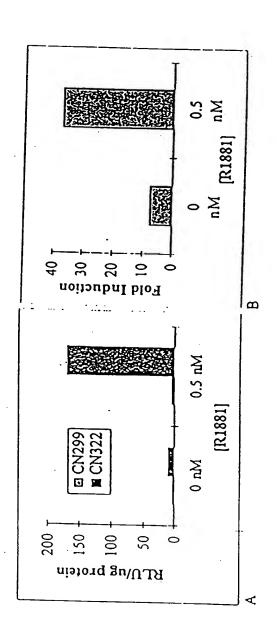


FIGURE 3

Inventor: lo YU et al. Application ...: 09/875,228 Docket No.: 348022000901

Sheet 7 of 33

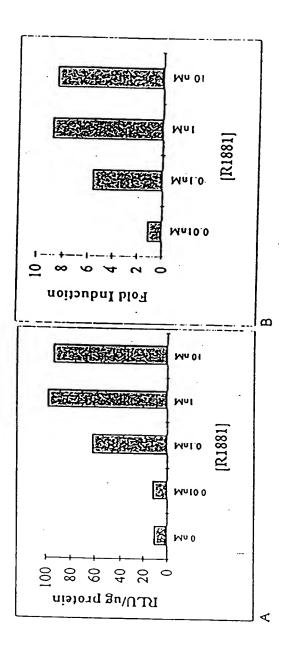
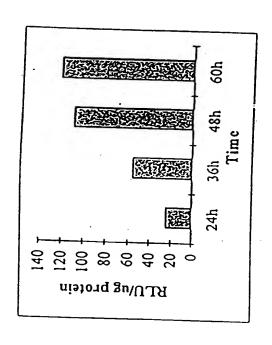


FIGURE 4

Sheet 8 of 33

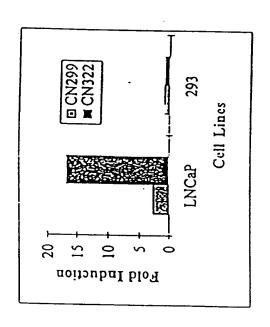


Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISOR THE ENHANCER AND METHODS OF USE THEREOF Inventor a YU et al.

Inventoria da YU et al. Application do:: 09/875,228 Docket No.: 348022000901



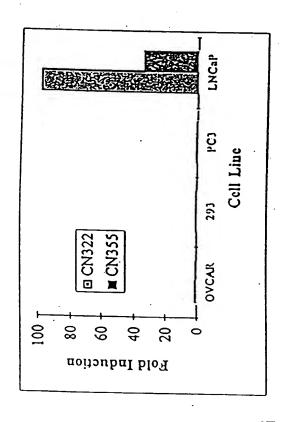
Sheet 9 of 33



TGURE 6

Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF Inventor: De YU et al.
Application No. 9/875,228
Docket No.: 348022000901

Sheet 10 of 33



Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS
COMPRISING THE ENHANCER AND METHODS OF USE THEREOF
Inventor: De 1975 (1975)
1875,228
Docket No.: 348022000901

#### Sheet 11 of 33

|       |             |             |       |             | . F  | old Induction |
|-------|-------------|-------------|-------|-------------|------|---------------|
| CN379 | -5155       |             |       | -3387       | -324 | 0.4           |
| CN373 |             |             | 2520  |             |      | 81            |
| CN386 | <del></del> | <u> </u>    | -3529 |             |      | 50            |
| CN387 |             |             | -3643 |             | · ·  | 90            |
| CN388 | -4814       | _           |       | -3387       |      |               |
| CNSOS |             |             | -3529 | <del></del> | -    | 35            |
| CN389 |             | <del></del> | -3323 |             |      | 30            |
| CN390 |             |             | -3643 |             |      | 96            |
|       |             | -4457       |       | -3387       |      |               |
| CN391 |             |             |       |             |      | 61            |
| CN392 |             |             | -3529 |             |      | 53            |
| CN393 |             | <del></del> | -3643 |             |      | 30            |
| CN394 |             |             | -3993 | -3387       |      | 55            |
| CN395 |             |             | -3529 |             |      | 45            |
| CN396 |             |             | -9643 |             |      | 37            |

# FIGURE 8

Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF Inventor: Vector of YU et al.
Application 109/875,228
Docket No.: 348022000901

Sheet 12 of 33

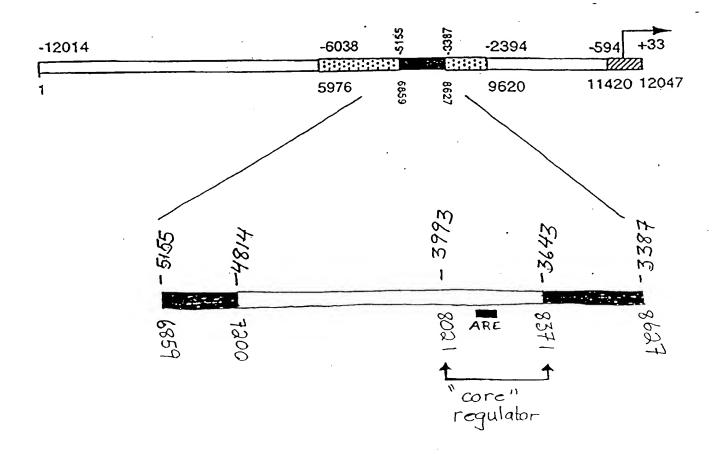
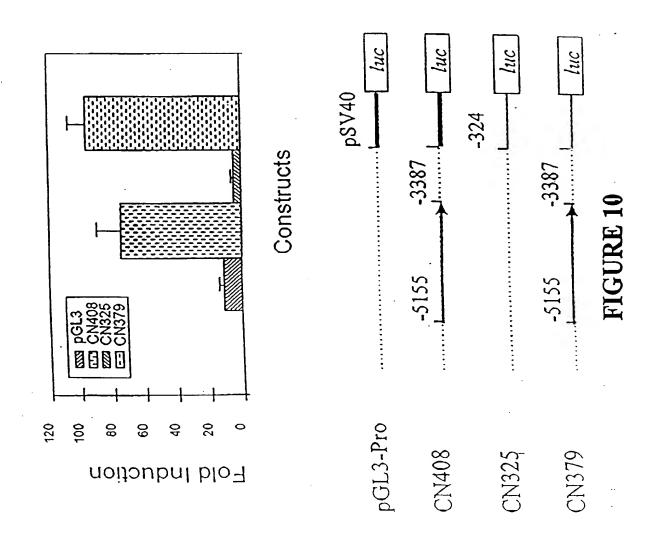


FIGURE 9

Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF Inventor hao YU et al.

Inventor Shao YU et al. Applica ... 09/875,228 Docket No.: 348022000901





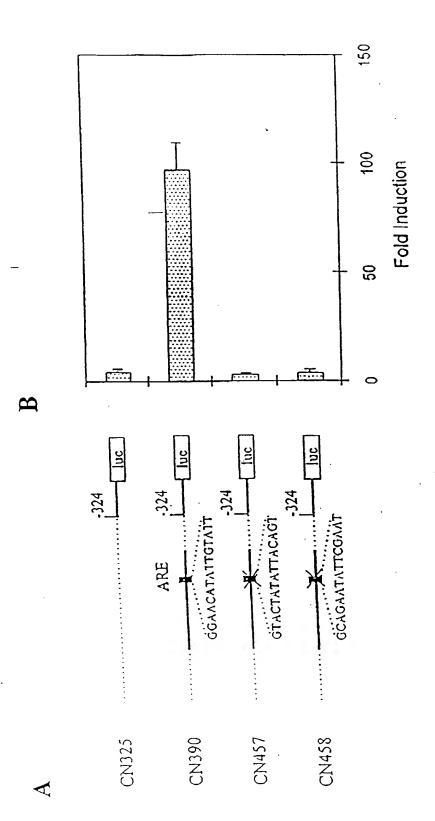
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Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF

Invento Chao YU et al. Applica. 40.: 09/875,228 Docket No.: 348022000901

Sheet 14 of 33



FIGURE, 11

Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF

Inventor: I p YU et al. Application 09/875,228 Docket No.: 348022000901

Sheet 15 of 33

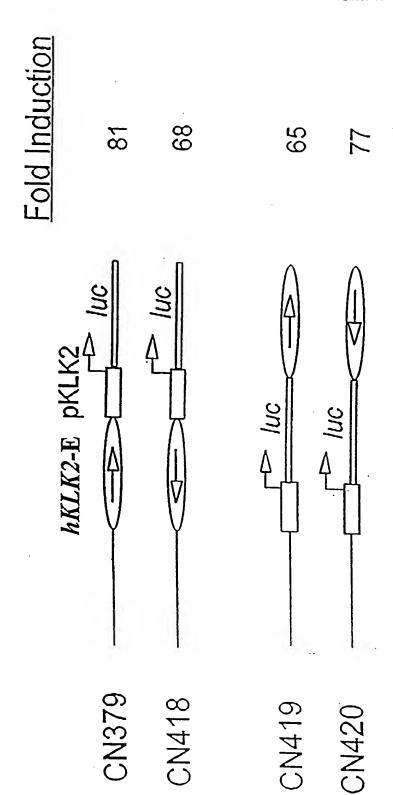


FIGURE 12

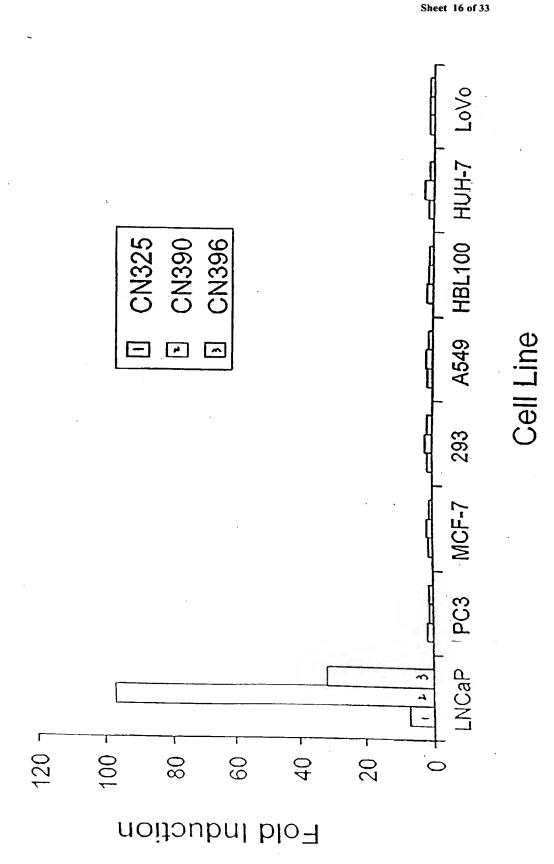
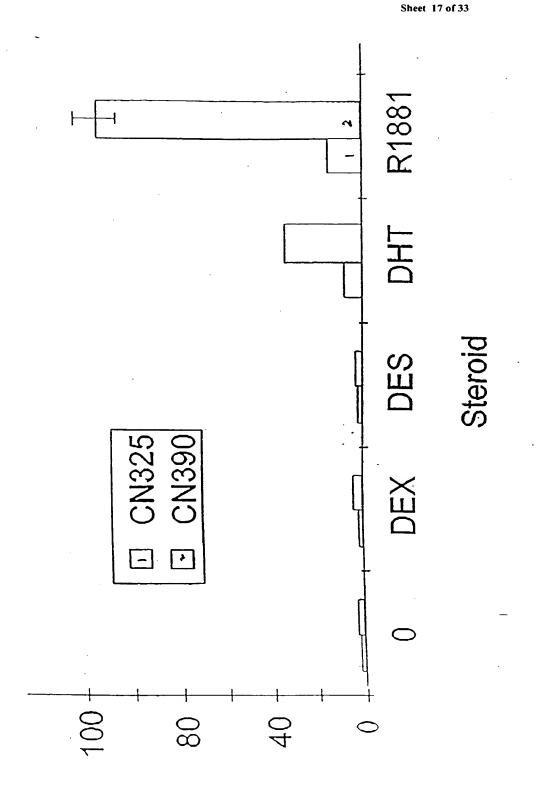


FIGURE 13



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Inventor: De YU et al. Application 9/875,228 Docket No.: 348022000901

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Sheet 18 of 33

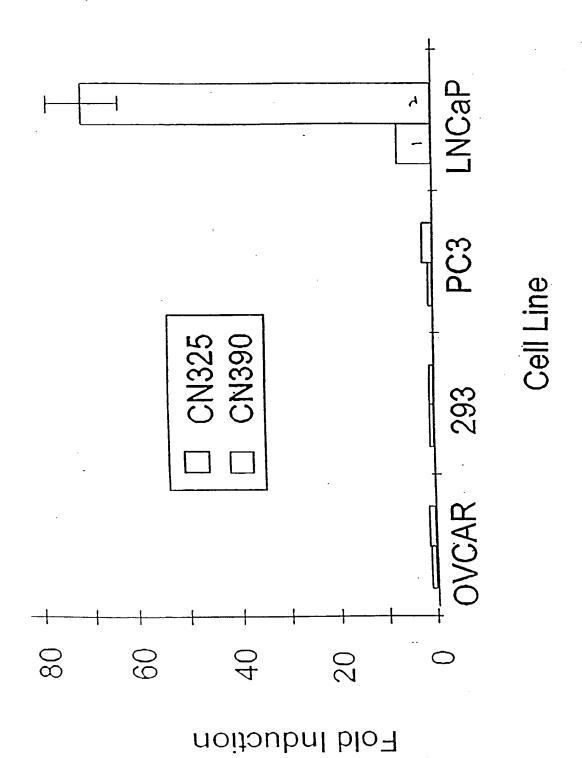
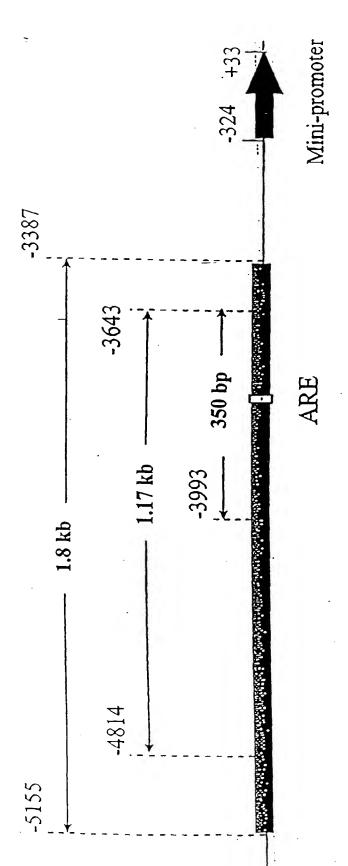


FIGURE 15

Inventor: De YU et al. Application 1 875,228 Docket No.: 348022000901

Sheet 19 of 33

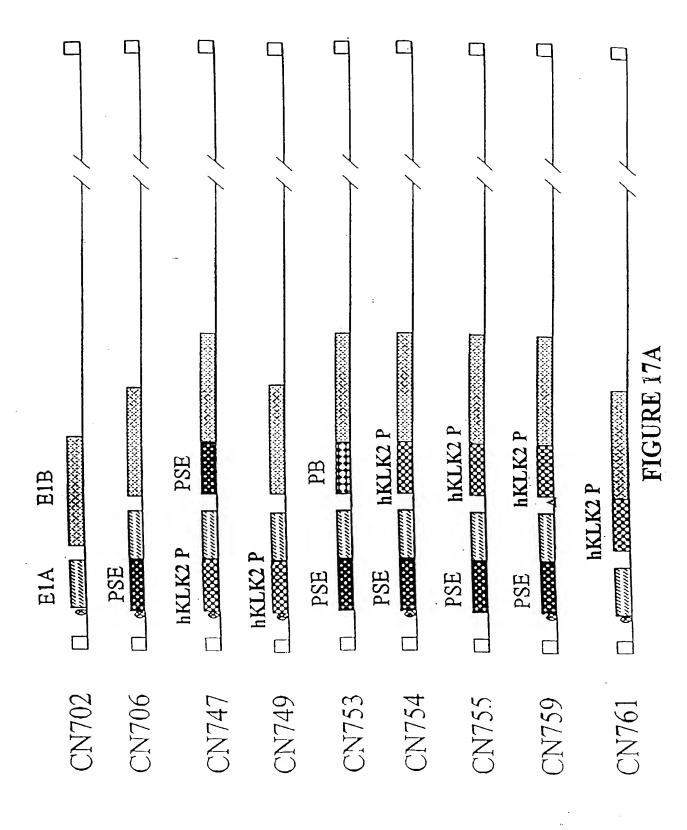


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FIGURE 16

Invent Chao YU et al. Applic. No.: 09/875,228 Docket No.: 348022000901



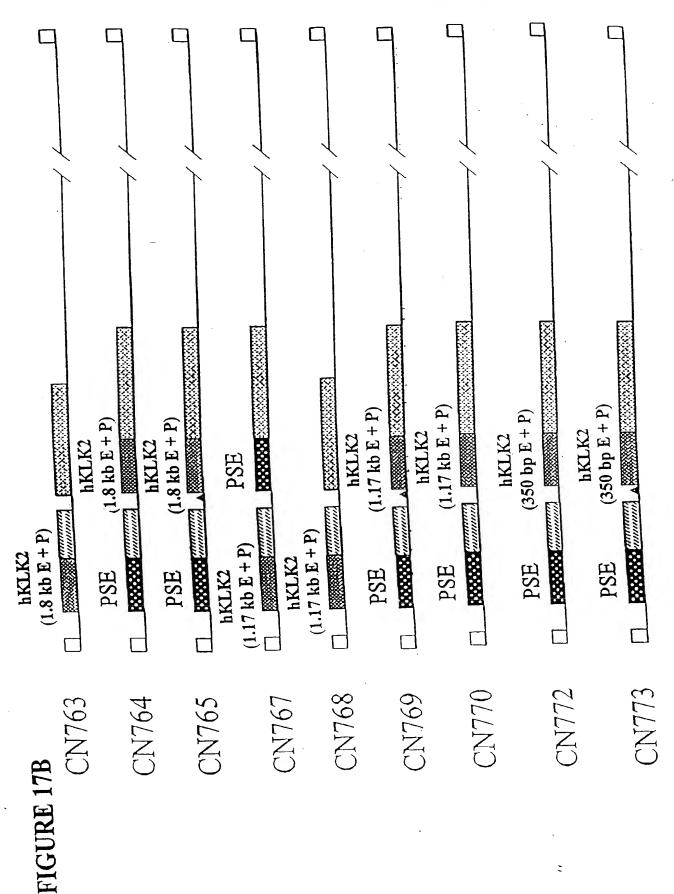


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Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF

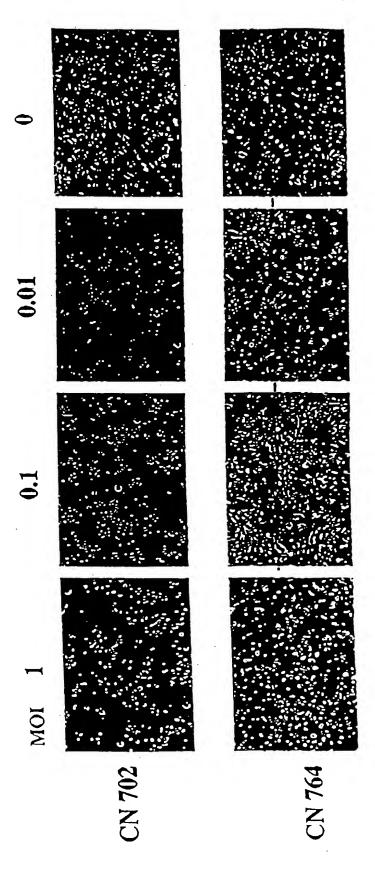
Inventor: D YU et al. Application 19/875,228 Docket No.: 348022000901

Sheet 21 of 33



Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF Inventor: De Company of the Company

Sheet 22 of 33



DOSYSTES LIEBOL

Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF

o YU et al.

09/875,228

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Docket No.: 348022000901

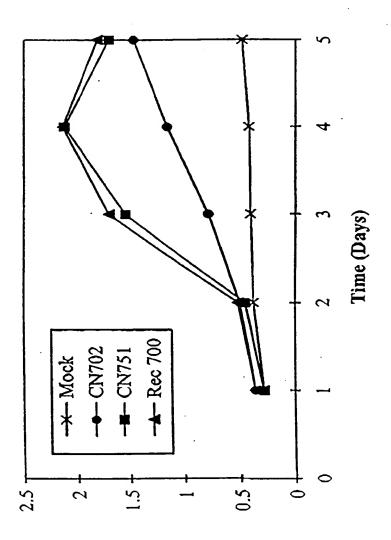
FIGURE 19

Sheet 23 of 33

Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF Inventor: 120 YU et al.
Application 1: 09/875,228
Docket No.: 348022000901





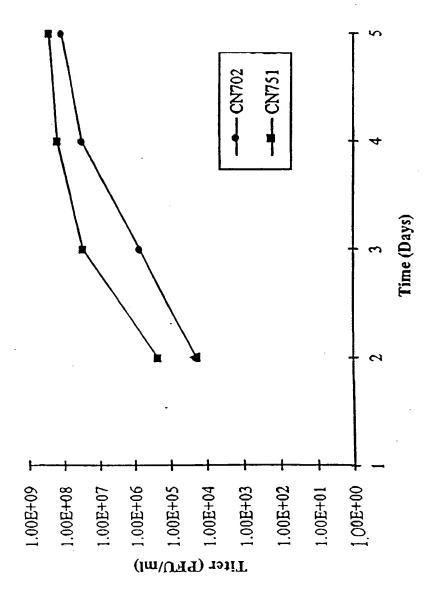


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ao YU et al.

Inventor: ao YU et al. Applicati : 09/875,228 Docket No.: 348022000901

Sheet 25 of 33



IGURE 21

Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF

Invent Chao YU et al. Applic No.: 09/875,228 Docket No.: 348022000901



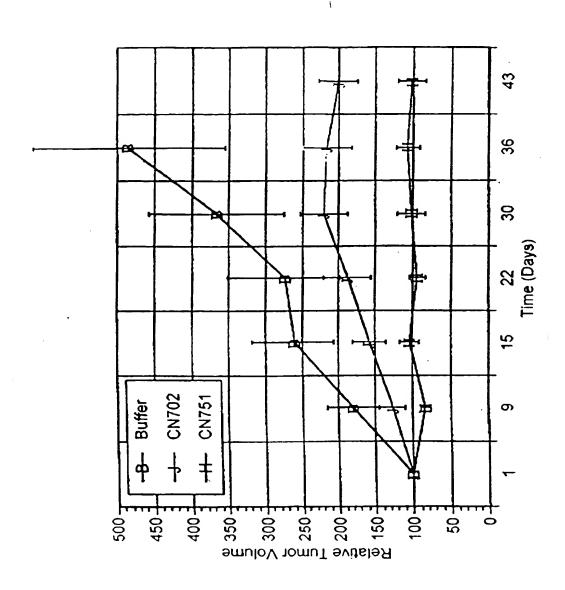
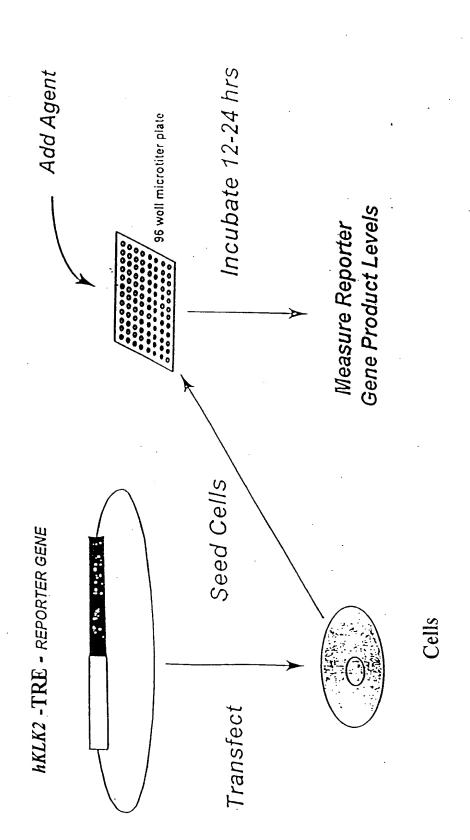


FIGURE 22

Sheet 27 of 33



Inventor: D Application 9/875,228 Docket No.: 348022000901

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Sheet 28 of 33

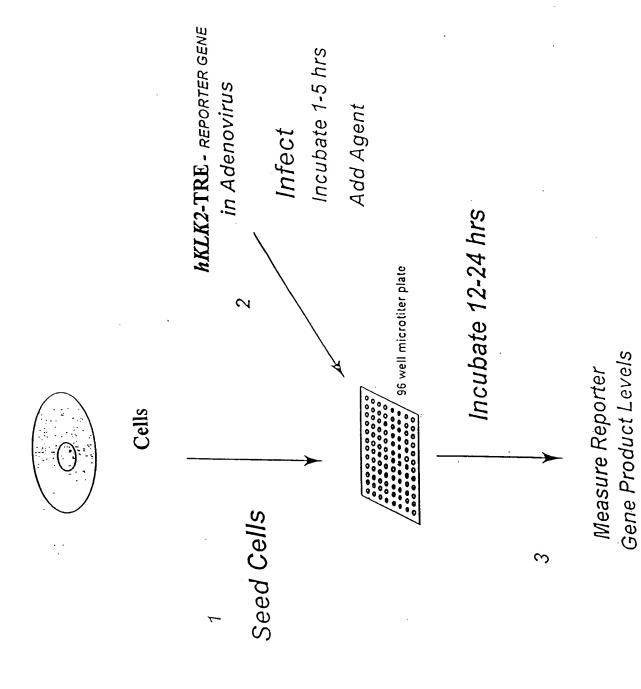
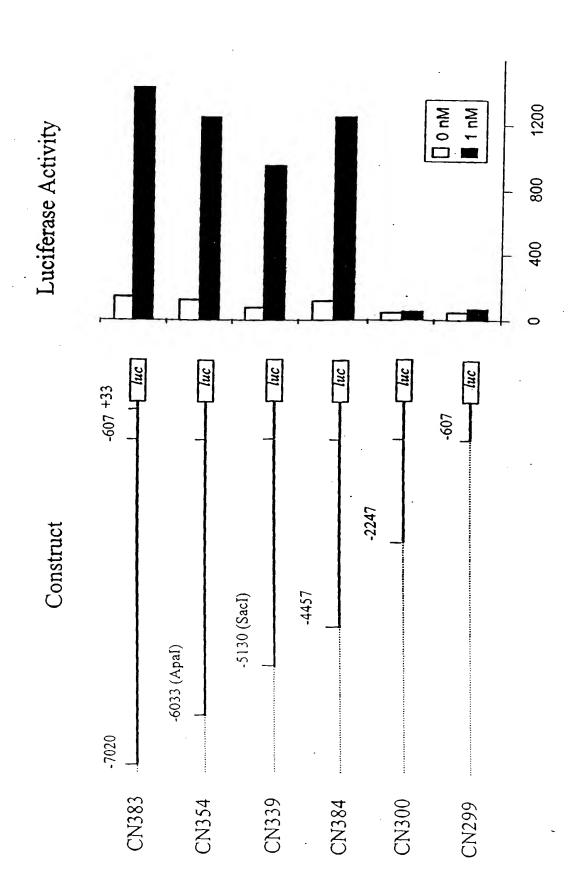


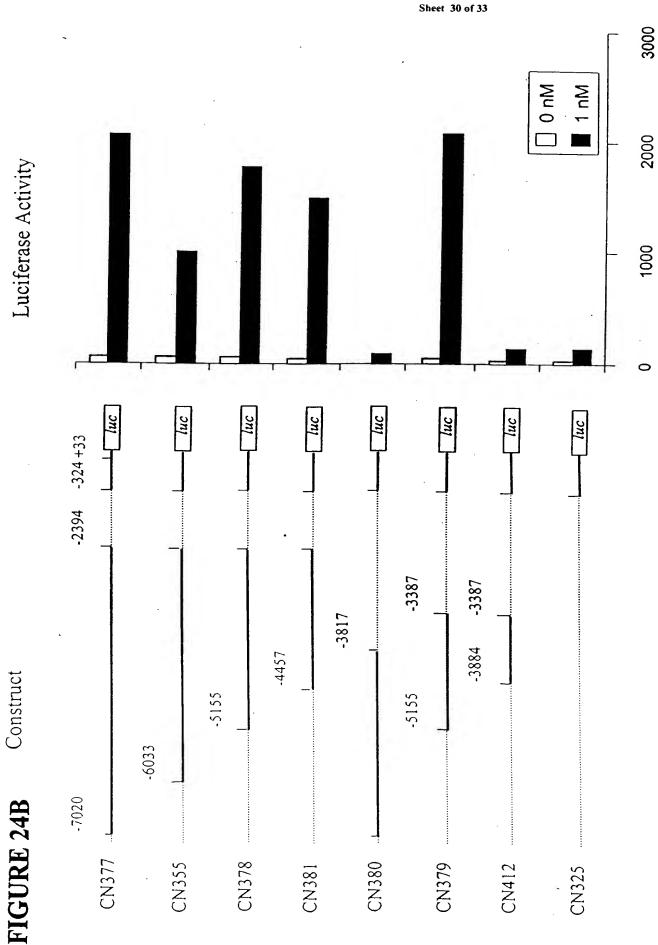
FIGURE 23B

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Sheet 29 of 33



Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF Inventor: District Physics (1998) 19875,228 Docket No.: 348022000901



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Title: A HUMAN GLANDULAR KALLIKREIN ENHANCER, VECTORS COMPRISING THE ENHANCER AND METHODS OF USE THEREOF Inventor: De 1975,228
Docket No.: 346622000901

Sheet 31 of 33

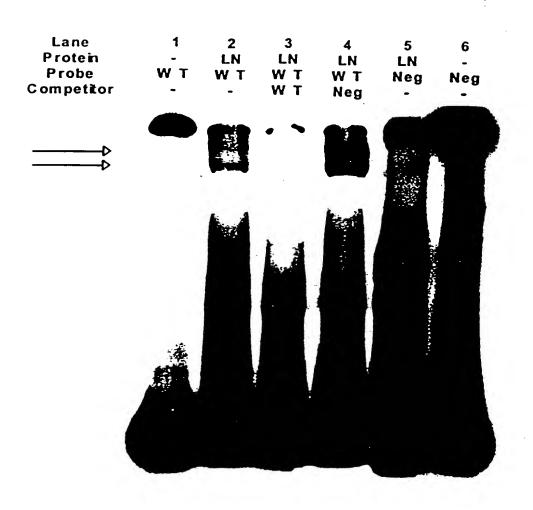


FIGURE 25A

Sheet 32 of 33

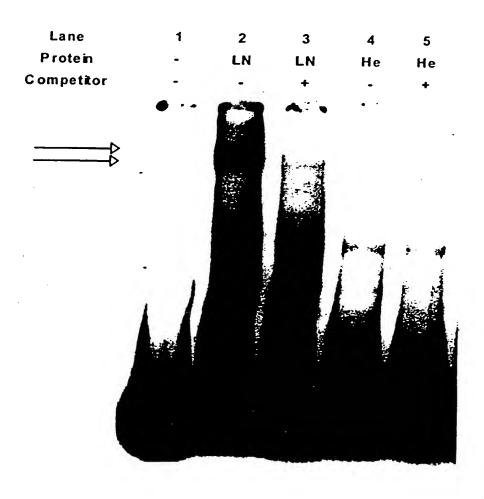


FIGURE 25B

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Appl No.: 09/875,228
Docket No.: 348022000901

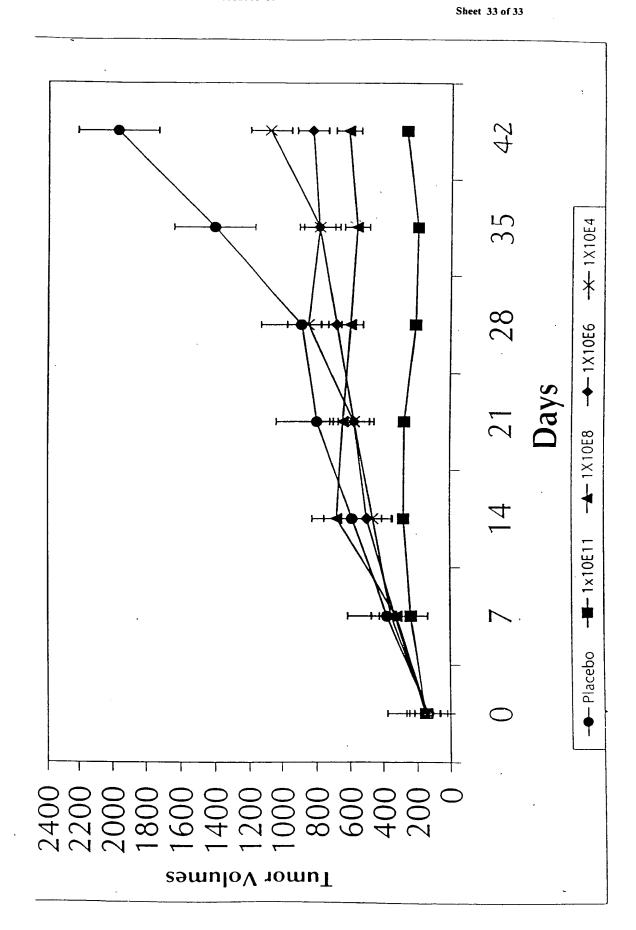


FIGURE 26